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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--------------------------|--------------------|----------------------|---------------------|------------------|
| 10/614,988 07/09/2003 | | Juergen Fahrenbach | 080408.52436US 9239 | |
| 23911 | 7590 08/24/2005 | • | EXAMINER | |
| CROWELL & MORING LLP | | | NGUYEN, JIMMY T | |
| INTELLECT | UAL PROPERTY GROUP | | . Der in ite | DADED MINADED |
| P.O. BOX 14300 | | | ART UNIT | PAPER NUMBER |
| WACHINGTON DC 20044 4200 | | | 2725 | |

DATE MAILED: 08/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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| | | Application No. | Applicant(s) | | | | |
|---|---|----------------------------------|-------------------------|--|--|--|--|
| Office Action Summary | | 10/614,988 | FAHRENBACH, JUERGEN | | | | |
| | | Examiner | Art Unit | | | | |
| | | Jimmy T. Nguyen | 3725 | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | | |
| Status | | | | | | | |
| 1)⊠ | 1) Responsive to communication(s) filed on 6/2/05. | | | | | | |
| 2a)⊠ | This action is FINAL . 2b) ☐ This action is non-final. | | | | | | |
| 3) 🗌 | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | | |
| | closed in accordance with the practice under E | x parte Quayle, 1935 C.D. 11, 45 | 3 O.G. 213. | | | | |
| Dispositi | on of Claims | | | | | | |
| 4)⊠ Claim(s) <u>1-5,7 and 9-21</u> is/are pending in the application. | | | | | | | |
| | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) | 5) Claim(s) is/are allowed. | | | | | | |
| | ☑ Claim(s) <u>1-5,7 and 9-21</u> is/are rejected. | | | | | | |
| | Claim(s) is/are objected to. | | | | | | |
| 8)[_] | Claim(s) are subject to restriction and/or | election requirement. | | | | | |
| Applicati | on Papers | | | | | | |
| 9) 🗌 🤈 | The specification is objected to by the Examiner | г. | | | | | |
| 10)⊠ The drawing(s) filed on <u>09 July 2003</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner. | | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | | |
| 11) 🔲 🗋 | The oath or declaration is objected to by the Ex | aminer. Note the attached Office | Action or form PTO-152. | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | |
| Attachment | i(s) | | | | | | |
| 1) Notice 2) Notice 3) Inform | (PTO-413) te atent Application (PTO-152) | | | | | | |

Response to Amendment

The amendment filed on June 02, 2005 has been entered and considered and an action on the merits follows.

Specification

The amendment filed June 02, 2005 fails to overcome the objection to the specification set forth in the previous Office action. The objection is herein repeated.

The specification is objected to under 37 CFR 1.71 as not clearly describing the subject matter. Regarding paragraph 30, the specification discloses that the flywheel 33 has displaceable flywheel masses 39 that can be displaced hydraulically, pneumatically or electrically. It is unclear how the masses are being displaced hydraulically, pneumatically, or electrically.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The amendment filed June 02, 2005 fails to overcome this rejection set forth in the previous Office action. The rejection is herein repeated.

Claim 9 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. See discussion in the objection to

the specification above regarding the hydraulically, pneumatically or electrically displaceable of the flywheel masses.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-5, 7, 9, 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Langenstein & Schemann (hereinafter "LS") (DE4421527), in view of Sudau (US 6,244,134).

Regarding claims 1 and as best understood, claim 9, LS discloses a press comprising a flywheel (13), and a shaft drive (19) acting upon a main shaft (7), wherein the shaft drive and the flywheel are mutually synchronized (see abstract). LS does not disclose that the flywheel having displaceable flywheel masses. However, the patent to Sudau teaches a drive system comprises a flywheel (5, 11) having displaceable masses (19) manually arranged in the flywheel (fig. 2). Sudau teaches this construction of the masses in the flywheel in order to response to a change in the rotation speed of the flywheel (col. 2, lines 42-47). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide LS's flywheel with a displaceable masses, as taught by Sudau, in order to response to a change in the rotation speed of the flywheel.

Regarding claim 2, the flywheel is connectable via the shaft with accessory devices (see fig. 1) of the press.

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Regarding claims 3 and 5, the flywheel is selectively coupleable to and uncoupleable (via coupling element (18)) from the shaft.

Regarding claims 4 and 18, the press inherently comprises a power supply network to provide power to operate the press, the shaft further comprises a brake (see abstract), which is inherently feed a not-required energy back into a power supply network when braking the shaft.

Regarding claim 7, the flywheel is arranged to be driven by a separate flywheel drive (9).

Regarding claim 17, the press further comprises a program (see fig. 1) connectable with the press for simulating a forming process.

Claims 1, 10-16 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sapolsky (US 3,557,686) in view of Sudau (US 6,244,134).

Regarding claim 1, Sapolsky discloses a press system comprising at least one flywheel (12), and at least one shaft drive (22) acting upon a shaft (23), wherein the at least one shaft drive and the at least one flywheel are mutually synchronized (col. 1, lines 26-33). Sapolsky does not disclose that the flywheel having displaceable flywheel masses. However, the patent to Sudau teaches a drive system comprises a flywheel (5, 11) having displaceable masses (19) arranged in the flywheel (fig. 2). Sudau teaches this construction of the masses in the flywheel in order to response to a change in the rotation speed of the flywheel (col. 2, lines 42-47). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was

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made to provide Sapolsky's flywheel with a displaceable masses, as taught by Sudau, in order to response to a change in the rotation speed of the flywheel.

Regarding claim 10, Sapolsky discloses a device configured to monitor rotational speed of the at least one flywheel (col. 1, lines 54-56).

Regarding claim 11, Sapolsky discloses a device configured to monitor rotational acceleration of the at least one flywheel (col.3, lines 5-29).

Regarding claim 12, Sapolsky discloses a timing device (col. 3, lines 64-74).

Regarding claims 13-16, Sapolsky discloses a self learning unit (20) comprising a device configured to analyze required energy and a device configured to predict required energy (col. 2, line 64 -col. 4, line 6).

Regarding claim 20, at least one shaft drive (22) has a device configured to monitor rotational speed (col. 2, lines 64-73).

Claims 1 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narita (US 6,474,227) in view of Sudau (US 6,244,134).

Narita discloses several presses (100A and 100B), wherein a shaft drive (102) of each press and a respective flywheel (104) of each press are mutually synchronized. The shaft drive (102) of each press acting upon a respective main shaft (108) (see fig. 1). Narita does not disclose that the flywheel having displaceable flywheel masses. However, the patent to Sudau teaches a drive system comprises a flywheel (5, 11) having displaceable masses (19) arranged in the flywheel (fig. 2). Sudau teaches this construction of the masses in the flywheel in order to response to a change in the rotation speed of the flywheel (col. 2, lines 42-47). Therefore, it

would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Narita's flywheel with a displaceable masses, as taught by Sudau, in order to response to a change in the rotation speed of the flywheel.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over LS and Sudau, as applied to claim 1 above, in further view of Swenson, Sr. (US 5,259,269). LS, as modified by Sudau, discloses the invention substantially as claimed as set forth above. LS discloses the press having the flywheel. LS does not disclose that the flywheel includes a device for compensating an unbalanced mass. However, the patent to Swenson teaches a drive system having a flywheel (13) comprises a device (W) welded to the flywheel to compensate for an unbalanced mass (col. 3, lines 39-40). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide LS's flywheel with a weight device, as taught by Swenson, in order to compensate for an unbalanced mass.

Response to Arguments

Applicant's arguments filed June 06, 2005 have been fully considered but they are not persuasive.

With regard to the 35 USC 112 rejections, Applicant argues that US 5,259,269 and US 5,457,883 disclose displaceable flywheel masses. This argument has been considered. However, these patents do not teach the masses are being displaced hydraulically, pneumatically, or electrically. The specification must clearly discloses the claimed subject matter in such a way as

to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

With regard to the prior art rejections, Applicant argues that the patent to Sudau is from the non-analogous art of a motor vehicles, and not in the pressing field. This argument has been considered. However, one skilled in the art would consider the teachings regarding a flywheel to be "reasonably pertinent" regardless of the machinery in which they are found. LS teaches a drive system having a flywheel and Sudau also teaches a drive system having a flywheel. Sudau teaches the flywheel having displaceable masses (19) arranged in the flywheel (fig. 2) in order to response to a change in the rotation speed of the flywheel. Therefore, it is obvious for one skilled in the art to provide the flywheel of LS with displaceable masses, as taught by Sudau, in order to response to a change in the rotation speed of the flywheel.

Applicant argues that Sudau does not teach the flywheel masses of the instant invention are solely within the flywheel and displaced in a controlled manner to change the moment of inertia for synchronizing the flywheel with the main shaft. With respect to Applicant's assertion, this argument is not found persuasive because claim 1 does not claim that the displaceable masses are coordinated with the synchronization.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy T. Nguyen whose telephone number is (571) 272-4520. The examiner can normally be reached on Mon-Thur 8:00am - 6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on (571) 272- 4419. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JTNguyen August 19, 2005 DERRIS H. BANKS
SUPERVISORY PATENT EXAMINER
TFCHNOLOGY CENTER 3700